

Highway Corridor Management Specifications for Highway Concessions



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BRITISH
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Highway Corridor Management Specifications for Highway Concessions

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APPENDIX Terminology and Interpretation

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1 GENERAL REQUIREMENTS

The scope of the Concession includes the provision of all products and services associated with the management, planning and delivery of operations, maintenance and rehabilitation activities.

This document defines the requirements for Corridor Management which is the application of best practices in conformance with Ministry province-wide policies and sound management techniques to maximize the reliability, safety and availability of the highway corridor for the benefit of the Highway Users and adjacent landowners consistent with all road networks within British Columbia.

Operational Performance Measures (OPMs) define the minimum condition for individual assets and corridor management requirements. These reflect the highway users expectations about the day-to-day serviceability for which the Concessionaire must comply based on standards and response time performance criteria.

This document contains OPMs for Corridor Management that extends the coverage or applies particular requirements over and above that specified within *Highway Maintenance Specifications for Highway Concessions*.

Inherent to the delivery of Corridor Management services is the requirement by the Concessionaire to develop, implement and maintain Environmental Management practices that ensure all activities are carried out in full compliance with Federal and Provincial Environmental laws.

Fundamental to the concept of performance based supply is the need for a co-operative, well managed approach by the contracted parties that ensures all major Concession objectives are consistently monitored and met. In order to achieve this, the Concessionaire is required to develop and implement an ISO certified Quality Management System (QMS) that documents the processes and procedures used in realizing the Measures detailed in this document.

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2 KEY PERFORMANCE MEASURES

2.1 General

Key Performance Measures (KPMs) are a set of outcome criteria, against which the Concessionaire's performance is measured. KPMs include measures relating to the management of the concession and delivery of Corridor Management and Environmental Management services.

2.2 Corridor Management

The Concessionaire is required to develop, implement and manage corridor activities to achieve specified outcomes.

The Concessionaire will aim to maximize the reliability, safety and availability of the highway corridor at all times. They will operate the concession for the satisfaction of highway users, adjacent landowners and members of the public. The requirement is that the Concessionaire manages the highway corridor consistent with the Ministry policies and regulations that apply to the management of all road networks within the Province.

Table 2.2.1 presents the Key Performance Measures for Corridor Management.

Item	Key Performance Measures
a. Winter Maintenance	<ul style="list-style-type: none"> • Achieve 100% route availability. • Ensure that travelling lanes are available and safe. • Provide a minimum of two-way, two -lane access at all times. • Ensure winter maintenance is carried out in an environmentally responsible manner.
b. Public Relations / Customer Care	<ul style="list-style-type: none"> • Ensure that the public has a positive perception of the Concession Highway and its management. • Ensure communications with all Highway Users is conducted promptly and in a professional manner. • Achieve nil complaints in respect to the processing of all communications.
c. Emergency Response and Management	<ul style="list-style-type: none"> • Maximize road availability • Achieve a timely and 24 hour/day and seven days/week Incident Response Service. • Minimize disruption to Highway Users. • Ensure travel lanes are safe. • Reinstate asset (i.e. repair damage)

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Table 2.2.1 Corridor Management KPMs	
Item	Key Performance Measures
d. Utility Coordination	<ul style="list-style-type: none"> • Ensure proactive coordination of utility related works in accordance with the <i>Ministry Utility Policy Manual</i>.
e. Development Coordination	<ul style="list-style-type: none"> • Ensure proactive coordination of development related works in accordance with the <i>Ministry Utility Policy Manual</i>.
f. Safety Management	<ul style="list-style-type: none"> • Reduce crash rate and number of fatalities. • Ensure health and safety systems are implemented
g. Lighting	<ul style="list-style-type: none"> • Achieve as a minimum the Provincial standards and be consistent with the Provincial highway network.
h. Concrete Barriers	<ul style="list-style-type: none"> • Ensure all barriers are in place and in a safe condition.
i. Access to Corridor	<ul style="list-style-type: none"> • Ensure compliance with the <i>Highways Act</i> and limit access to the highway to designated intersections and interchanges only.
j. Signs and delineation	<ul style="list-style-type: none"> • Achieve as a minimum the Provincial standards and be consistent with the Provincial highway network.
k. Unofficial signs	<ul style="list-style-type: none"> • Ensure that unofficial signs are not permitted. • Ensure highway is free of unofficial signs.
l. Wildlife Management	<ul style="list-style-type: none"> • Ensure that wildlife do not create a hazard to Highway Users.
m. First Nations issues	<ul style="list-style-type: none"> • Ensure 100% compliance with all relevant Federal and Provincial Legislation.
n. Rest Areas, Viewpoints and Pullouts	<ul style="list-style-type: none"> • Ensure that Rest Areas, Viewpoints and Pullouts are maintained in an attractive condition with tidy and serviceable facilities. • Ensure that there is no reduction in the number and no changes in the locations of existing Rest Areas, Viewpoints and Pullouts without Ministry approval. • Ensure compliance with the <i>Ministry Rest Area Commercialization Policy</i> when there are requests for commercialization of areas within the Right-of-Way.
o. Vegetation and Litter Control	<ul style="list-style-type: none"> • Achieve as a minimum the Provincial standards and be consistent with the entire Provincial highway network including cooperation with the Ministry's Adopt-a-Highway policy. • Ensure safety for road users with respect to shading by trees, visibility to signs/delineators/intersections/etc, and fire hazard. • Ensure a tidy and litter free corridor that enhances the attraction of the highway to the traveling public.
q. Gravel Pit Management	<ul style="list-style-type: none"> • Recognize that the management of the currently used gravel pits will remain the responsibility of the Ministry • Co-operate with the Ministry in respect to any extraction operations by the Concessionaire. • Seek all relevant licenses from Ministry for extraction of the gravel and/or seek out and use other sources of gravel. • Assess the quality or appropriateness of the material in

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Item	Key Performance Measures
	whatever uses it is intended. <ul style="list-style-type: none">• Comply with <i>The Mines Act</i> in all respects.
r. Line Marking	<ul style="list-style-type: none">• Ensure line markings are visible, to specified standards at all times.

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2.3 Environmental Management

The Concessionaire is required to develop, implement and maintain Environmental Quality Management Plan that ensure all activities are carried out in full compliance with Federal and Provincial Environmental laws. The Concessionaire will aim to minimize impact on the environment at all times with respect to activities carried out in operating this concession.

Table 2.3.1 presents the Key Performance Measures for Environmental Management.

Table 2.3.1: Environmental Management KPMs	
Item	Key Performance Measures
a. Environmental Objectives, Planning and Review	<ul style="list-style-type: none"> • Ensure environmental objectives are defined for all areas of potential environmental impact. • Review environmental objectives and associated strategies at least annually.
b. Identification of Environmental Impacts	<ul style="list-style-type: none"> • Develop, document and maintain a register of identified areas of potential or known environmental hazards.
c. Assessment of Environmental Impacts	<ul style="list-style-type: none"> • Prioritize identified areas and activities of potential or actual environmental impact based on assessment of risk.
d. Mitigation and Management of Environmental Impacts	<ul style="list-style-type: none"> • Implement a program of environmental impact mitigation based on prioritized assessment of areas and activities of potential or actual environmental impact. • Monitor and review effectiveness of environmental impact mitigation.
e. Legislation Assessment and Tracking	<ul style="list-style-type: none"> • Identify and assess relevance of all identified Federal and Provincial Legislation. • Ensure 100% compliance with all relevant Federal and Provincial Legislation.
f. Waste Management	<ul style="list-style-type: none"> • Minimize waste generation associated with all activities. • Ensure appropriate handling and disposal of waste materials.
g. Storage and Handling of Hazardous Materials	<ul style="list-style-type: none"> • Ensure all hazardous materials are stored and handled in accordance with manufacturer's recommendations and/or environmental legislative requirements.
h. Wildlife Management	<ul style="list-style-type: none"> • Minimize impact on wildlife by implementing mitigation procedures.
i. Environmental Emergency Preparedness	<ul style="list-style-type: none"> • Ensure rapid environmental emergency response capability in all areas.

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3 CORRIDOR MANAGEMENT

3.1 Winter Maintenance

3.1.1 General

The effective management of winter operations is a crucial requirement of the Concession. The effects of snow and ice on the highway must be managed to maximize the availability of all lanes and ensure the safety of highway users and maintenance crews.

There is a need for the Concessionaire to be cognizant of changing weather patterns and the requirement for proactive winter management. The option of closing the road and not managing winter hazards is not acceptable.

3.1.2 Requirements

The Concessionaire will have full responsibility for delivery of this service.

The Concessionaire is required to employ sufficient resources to comply with the Ministry *Highway Maintenance Specifications for Highway Concessions*. Personnel must be experienced and competent in monitoring weather and dealing with winter conditions similar to the Highway Concession. The Concessionaire is encouraged to undertake ice prediction and the proactive treatment of ice.

Environmental effects due to the storage and use of de-icing and anti-icing agents must be mitigated. Operational requirements specified in present and future provincial and federal laws must be complied.

The Concessionaire will be required to develop and apply a Salt Management Plan and use best practices as part of their operations and report information to the Province as per Federal reporting requirements.

Communication is key to successful winter management. Lines of communication need to be strong and well-established. The Concessionaire is required to provide information on road conditions to the Provincial Highway Condition Centre in compliance with the Ministry Specification *3-340 Highway Condition Reporting*. Accurate and timely information is required for broadcast by the Provincial Highway Condition Centre and for messages to be displayed on variable message signs.

Weather monitoring and highway condition data collection and systems will be the responsibility of the Concessionaire who will provide climate data to the

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Ministry as required. Data on road closures caused by winter conditions will be provided to the Ministry as and when they occur.

The Concessionaire is required to apply new technology and to implement revisions to industry standards.

3.1.3 Operational Performance Measures

The Concessionaire is required to conform to the Operational Performance Measures by complying with all the specified requirements and response times from the adapted Ministry *Highway Maintenance Specifications for Highway Concessions* and will:

3.1.4 Applicable Ministry Specifications

Highway Maintenance Specifications for Highway Concessions that are directly applicable include:

1-180	Pavement Surface Cleaning.
1-190	Debris Removal
1-200	Highway Structures Maintenance
3-300	Highway Snow Removal
3-310	Winter Abrasive and Chemical Snow and Ice Control.
3-315	Compact Snow
3-320	Roadside Snow and Ice Control
3-330	Weather Monitoring.
3-340	Highway Condition Reporting
5-440	Sign System Maintenance
5-470	Highway Traffic Control

3.1.5 References

Recommended references include:

- Highway Maintenance Specifications for Highway Concessions;
- Transportation Association of Canada's (TAC) Salt Management Guide;
- Environment Canada Codes of Practice for the Environmental Management of Road Salts;
- Salt Management Guide for British Columbia;
- Provincial Highway Condition Centre Manual; and
- Ministry Traffic Control Manual for Work on Roadways.

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3.2 Public Relations / Customer Care

3.2.1 General

Public Relations / Customer Care encompasses communication with other agencies, stakeholders and the public. It includes for example the following activities:

- Answering general and specific enquiries or requests for information;
- Proactive interaction with stakeholders;
- Advising the media of road conditions;
- Co-ordinating with the Provincial Highway Condition Centre to provide information and display accurate and timely messages on signage systems;
- Receiving and processing applications from the public, including but not limited to the following activities:
 - a) Close a road;
 - b) Hold sporting, recreational or other events on the road;
 - c) Perform works on or below the road surface;
 - d) Construct an access onto a road;
 - e) Authorize a fence encroachment;
 - f) Plant or remove trees; and
 - g) Authorize a signage installation.
- Co-ordinating themes and messages with other communications from the Ministry communications.

The Concessionaire will establish and implement a Communications and Customer Care Plan (CCP) that is applicable to all of its internal and external relationships for delivery of Services on the Concession Highway. The plan will meet the requirements of the Ministry with regard to content of the plan itself, the hours of business, delivery times and staff training, as detailed below.

Through the implementation of its CCP, the Concessionaire is required to ensure the development, monitoring and review of the relationship with the Ministry's customers.

Customer care is defined as the provision of service that communicates to the customer the importance of their request to the Ministry, clearly and concisely explains the level of service delivery that can be provided and ensures that the stated level of service is provided.

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The regulatory nature of some of the activities carried out by the Concessionaire on behalf of the Ministry will, from time to time, require diplomacy in customer interface.

The development of a customer care culture must be a priority of the Concessionaire to meet stakeholder's expectations.

The Concessionaire will:

- Provide high quality service that is courteous, friendly, accurate, and timely;
- Implement quality systems that ensure a consistent and professional service delivery to customers;
- Enhance customer care through service level surveys and regular measurement of customer satisfaction; and

The CCP will as a minimum address the following issues:

- Identification of external customers and their interface with the Ministry on highway issues;
- Use of technology to facilitate communication between the customer, Concessionaire and the Province on highway issues;
- Development of and implementation of a service request system in order to provide a seamless interface with the Ministry, others, management of information and customer care;
- The identification of critical highway issues and appropriate response times;
- Customer satisfaction monitoring and reviews;
- Development of corporate standards for customer care; and
- Action plans or operational strategies to enhance customer care.

The Concessionaire will promote itself as the key contact with the public for highway related matters. To this end, the concessionaire's contact details will be widely advertised. However, the Ministry expects to receive some enquires directly and will transfer these to the Concessionaire for response.

The Ministry reserves the right to contact any or all persons making contact to check on the quality of service and/or information provided.

The Concessionaire is required to develop procedures for capturing potentially controversial situations in order that the Ministry remains informed.

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To this end the Concessionaire will be available to respond to customers during the hours of 8:00am to 5:00pm, Monday to Friday, and will maintain a 24-hour call centre facility to receive, respond and log calls.

The Concessionaire will develop a system and customer care protocols that capture customer contact by way of any one of the following:

- Telephone;
- Facsimile;
- Email;
- Personal contact; and
- Written correspondence.

The protocols will include but are not be limited to:

- Telephone protocols, including time to pick up, greeting style, use of 1800 numbers;
- Voicemail protocols, including greeting style and standard information supplied, acknowledgments and clearance times;
- Email protocols, and the production of an internet web site in conjunction with existing Ministry initiatives where necessary;
- Correspondence protocols, including the ability to respond within 10 working days, the style of language, jargon avoidance, recording and filing; and
- Public counter and field contact protocols, including providing the customer with full attention, accurate information and contact recording.

3.2.2 Operational Performance Measures

The Concessionaire is required to conform to the Operational Performance Measures by complying with the approved CCP and the response times detailed below:

The response times relating to the determination and/or identification of issues and responding to the customer with information on the intended response should be based on the following broad criteria:

- **Level 1 Response (less than 1 hour)** - Probability of failure very high and will result in injury or damage to a significant asset (public or private);
- **Level 2 Response (less than 1 day)** - Probability of failure high, but consequence unlikely to result in injury, but might result in damage to property;

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- **Level 3 Response (less than 5 working days)** -Probability of failure low and unlikely to result in damage to property;

A further Operational Performance Measure will relate to complaints. The number of complaints are to be measured and the time to acknowledge, time to meet on site, time to complete action as appropriate (either satisfy complainant or provide advice of respective applicable Ministry policy)

The communications register, with as a minimum the above information, will be available continuously online to the Ministry who will track through a sample of complaints/enquiries for meeting timeliness requirements and customer satisfaction. (Note that sometimes a complaint may be unjustified and/or satisfaction may not be possible if Ministry policies are not acceptable by the customer. In those cases, a record of the advice provided, in a courteous manner, will be recognised as completeness of the resultant action.)

A customer survey will be arranged annually by the Concessionaire to be undertaken by an independent certified agency consistent with Ministry practices for the adjacent maintenance contract areas. Questions should be structured to obtain meaningful and relevant feedback, and should also include questions related to maintenance of the road such as response times, levels of service, ride, winter performance, etc. The questions and results of the survey will be provided to the Ministry.

A target of at least 90% satisfaction is required (i.e. 90% of surveyed customers report the service provided by the concessionaire as satisfactory or better).

Where inaccurate or untimely messages cause safety concerns or inconvenience to motorists then steps must be immediately taken to correct the misinformation being presented. Full compliance with *Highway Maintenance Specifications for Highway Concessions 3 - 340 Highway Condition Reporting* is required. Note that the concessionaire's positive coordination with the Provincial Highway Condition Centre is paramount in meeting this measure.

3.2.3 References

References include:

- Highway Maintenance Specifications for Highway Concessions;
- Ministry Policies on corridor issues; and
- Provincial Highway Condition Centre Manual.

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3.3 Emergency Response

3.3.1 General

Emergency Response will receive close public attention and scrutiny and is another critical aspect of management of the Concession. Safety of highway users is paramount and response must comply with the respective adapted *Highway Maintenance Specifications for Highway Concessions* and the provincial ICS (Incident Command System).

The Concessionaire is also required to comply with the British Columbia Emergency Response Management System (BCERMS), which is a comprehensive provincial management system based upon the ICS that ensures a coordinated and organized response and recovery to all emergency incidents and disasters. It provides the framework for a standardized emergency response in British Columbia. The Concessionaire may be called upon to respond to Provincial emergencies (e.g. earthquakes and forest fires).

The Concessionaire is required to:

- Ensure that staff contact information is available to the Ministry, local governments and emergency service providers and that notification will take place that may be required to respond to any and all emergencies.
- trains its employees in procedures related to response/recovery and other types of emergency training as required by the Province;
- cooperates with the Province and other agencies when responding to emergencies; and
- Completes all necessary paperwork and provides all necessary documentation and records (inclusive of taking photographs at emergency sites), as may be required by the Province or other agencies.

The Concessionaire is required to develop and apply an Emergency Response Plan that provides the basis for how the Concessionaire responds to any and all emergencies, but not limited to:

- Floods;
- Mud, earth and rockslides;
- Avalanches;
- Extended winter storms;
- Toxic spills;
- Structural damage;
- Earthquakes; and
- Forest Fires

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3.3.2 Operational Performance Measures

The Concessionaire is required to conform to the Operational Performance Measures by complying with all the specified requirements and response times from the *Highway Maintenance Specifications for Highway Concessions* and using ICS procedures.

3.3.3 Applicable Ministry Specifications

Highway Maintenance Specifications for Highway Concessions that are directly applicable include:

1-190	Debris Removal
3-340	Highway Condition Reporting
5-440	Sign System Maintenance.
5-470	Highway Traffic Control.
7-760	Flood Control & Washout Response
7-770	Mud, Earth & Rockslide Response
7-780	Accident & Vandalism Response.
7-790	Snow & Avalanche Response
7-800	Structural Damage Response

3.3.4 References

References include:

- Highway Maintenance Specifications for Highway Concessions;
- Bailey Bridge Installation Specifications;
- Traffic Control Manual for Work on Roadways; and
- British Columbia Emergency Response Management System (BCERMS)
- British Columbia Incident Command System (ICS)
- Provincial Highway Condition Centre Manual.

3.4 Safety Management and Intervention

3.4.1 General

The Ministry is committed to reducing vehicle accidents by improving the safety aspects of the Highway. A strong road safety culture is about being both:

- a) Proactive by ensuring construction complies with current safe design standards, guidelines, and policies; and
- b) Reactive to existing known hazards by ensuring that higher risk sites are progressively treated.

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The key to improving road safety along the Highway is the implementation of a Safety Management Plan, which identifies the risks and defines the mitigation strategies.

3.4.2 Requirements

The Concessionaire will have full responsibility for:

- a) Reducing the number and severity of crashes by applying proactive, best practice road safety engineering techniques;
- b) Reducing the number of known road safety hazards on the Highway route;
- c) Providing a road that is safe, consistent, free of surprises and forgiving;
- d) Eliminate all serious and fatal crashes where road conditions are deemed to be a contributing factor (mitigate all significant safety hazards along road sections that are reconstructed under the Concession);
- e) Encourage and develop a road safety “culture” in the services provided; and
- f) Health and safety of all Highway users including Concessionaire personnel.
- g) Provide appropriate traffic control at all maintenance sites, construction sites, planned events, and planned closures.

A Safety Management and Intervention Plan is required to be developed and implemented, by the Concessionaire, in accordance with Ministry *Highway Reporting Specifications for Highway Concessions*.

The Concessionaire is also required to stay abreast of and apply technology change and revisions to safety standards.

3.4.3 Operational Performance Measures

The Concessionaire is required to conform to the Operational Performance Measures by complying with all the specified requirements and response times from the adapted Ministry *Highway Maintenance Specifications for Highway Concessions* and will:

- Full comply with respective laws, regulations and the WCB (Workers Compensation Board) requirements;
- Maintain an accurate and complete crash database;
- Regularly analyze the crash data to identify safety hazards;

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- Produce necessary applications for funding to the ICBC for safety improvement works;
- Maintain a positive working relationship with ICBC;
- Provide proactive traffic management at all worksites and incidents in accordance with the Ministry *Highway Maintenance Specifications for Highway Concessions*.

3.4.4 Applicable Ministry Specifications

Highway Maintenance Specifications for Highway Concessions that are directly applicable include:

5-470 Highway Traffic Control

3.4.5 References

Recommended references include:

- Highway Maintenance Specifications for Highway Concessions;
- Provincial Highway Condition Centre Manual; and
- Ministry Traffic Control Manual for Work on Roadways.

3.5 Utilities Coordination

3.5.1 General

Utility operators are entitled to install services in the highway corridor. The integrity of the highway however must be protected, damage minimized, and the Ministry indemnified against any future claims of liability. The Ministry Utility Policy Manual specifies conditions that apply. The Concessionaire is required to manage and coordinate utility related works in accordance with that Manual.

The Concessionaire is required to liaise with the various utility operators to coordinate work on utilities with road maintenance and rehabilitation activities.

3.5.2 Operational Performance Measures

The Concessionaire is required to comply with the Communications and Customer Care Plan in dealings with utility operators.

The delivery time for reporting to the Ministry in the event of any problems with the performance of the utility is 24hrs in relation to safety matters and one week in relation to any other matter.

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3.6 Development Coordination

3.6.1 General

Development adjacent to the highway may occur by the direction of the Ministry that requires the Concessionaire to liaise with contractors to coordinate access work. The integrity of the highway must be protected, damage minimized, and the Ministry indemnified against any future claims of liability.

3.6.2 Operational Performance Measures

The Concessionaire is required to comply with the Communications and Customer Care Plan in dealings with other contractors.

The delivery time for reporting to the Ministry in the event of any problems with the performance of the contractor is 24hrs in relation to safety matters and one week in relation to any other matter.

3.7 Electrical Systems

3.7.1 Requirements and Operational Performance Measures

The requirements for routine electrical maintenance are defined in the Ministry's Performance-based Electrical Maintenance Specifications.

Inventory and Inspections

An inventory of all electrical systems across the highway is to be maintained accurately and completely. This inventory including available drawings will be provided in electronic format and hardcopy to the Ministry annually. All records of inspections plus corrective and preventive actions are to be filed and made available at any time for inspection by the Ministry.

3.7.2 References

References include:

- Ministry Performance-based Electrical Maintenance Specifications
- Highway Maintenance Specifications for Highway Concessions;
- Ministry Standard Specifications for Highway Construction; and
- Provincial and Federal Electrical Safety Codes.

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3.8 Signage and Delineation

3.8.1 General

Clean, functional signage (regulatory, information and directional) improves safety and convenience for highway users.

The Concessionaire will maintain all signs and delineation consistent with the standards as set by the Ministry, in conformance with Ministry signing specifications (as updated from time to time) and the Operational Performance Measures below. Signage and delineation are the sole responsibility of the Concessionaire and conformance with requirements is to be demonstrated on an ongoing basis through the application of the Quality Management System.

References in the *Highway Maintenance Specifications for Highway Concessions* to the Ministry being responsible for any signage, e.g. signs over 3.2m², do not apply to this Concession. All other requirements and response times do apply.

3.8.2 Operational Performance Measures

The Concessionaire is required to conform to the Operational Performance Measures by complying with all the specified requirements and response times from the Ministry *Highway Maintenance Specifications for Highway Concessions*.

3.8.3 Applicable Ministry Specifications

Ministry *Highway Maintenance Specifications for Highway Concessions* that are directly applicable include:

5-440	Signs & Delineation Maintenance
5-445	Highway Surface Reflector Maintenance
5-470	Highway Traffic Control.

3.8.4 References

References include:

- Ministry Highway Maintenance Specifications for Highway Concessions;
- Manual of Standard Traffic Signs and Pavement Markings;
- Motor Vehicle Act;
- Service & Attraction Sign Manual; and
- Ministry Policy for Highway Signs

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3.9 Wildlife Protection

3.9.1 General

Wildlife can be a significant safety hazard within the road right-of-way particularly at night. Fencing and deer reflectors are used at high-risk areas to reduce the risk of collision and to protect animal from being injured. Regular inspections are to be undertaken to identify damage to these facilities and loss of functionality. Repairs will be implemented in accordance with the relevant maintenance specification.

On being reported or discovered, dead animal on the road will be removed under the debris removal specification and compliance with the requirements of the Ministry Wildlife Accident Reporting System.

3.9.2 Operational Performance Measures

The Concessionaire is required to conform to the Operational Performance Measures by complying with all the specified requirements and response times from the Ministry *Highway Maintenance Specifications for Highway Concessions* and the Ministry Wildlife Accident Reporting System.

3.9.3 Applicable Ministry Specifications

Ministry *Highway Maintenance Specifications for Highway Concessions* that are directly applicable include:

1-190	Debris Removal
4-440	Roadside Fence Maintenance
5-440	Signs and Delineation Maintenance
5-470	Highway Traffic Control

3.9.4 References

References include:

- Ministry Highway Maintenance Specifications for Highway Concessions; and
- Ministry Wildlife Accident Reporting System.

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3.10 Rest Areas, Viewpoints and Pullouts

3.10.1 General

Rest areas, viewpoints and pullouts are important for road safety as they provide for regular rest stop opportunities for drivers who may otherwise become fatigued and they also provide areas to stop away from the road shoulder.

Rest areas, viewpoints and pullouts are to be attractive encouraging drivers to stop. The areas must be kept clean and tidy with serviceable toilet facilities and well-maintained furniture and appropriate vegetation control.

3.10.2 Operational Performance Measures

The Concessionaire is required to conform to the Operational Performance Measures by complying with all the specified requirements and response times from the Ministry *Highway Maintenance Specifications for Highway Concessions*.

3.10.3 Applicable Ministry Specifications

Ministry *Highway Maintenance Specifications for Highway Concessions* that are directly applicable include:

4-370	Litter Collection / Graffiti
4-380	Rest Area Maintenance
4-390	Landscaping Maintenance

3.10.4 References

References include:

- Ministry Highway Maintenance Specifications for Highway Concessions;
- Ministry Policies on rest areas; and
- Rest Area Master Development Plan.

3.11 Vegetation Control and Litter

3.11.1 General

The control of vegetation is imperative in situations where safety of highway users may be compromised by trees or brush encroaching the road or obstructing visibility. Vegetation should be controlled to prevent shading (and icing) of the highway, fire risks, and potentially unstable trees from causing a

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hazard on the road. Vegetation must not obstruct sight distances or visibility to signs and at points of traffic conflict (such as interchanges and intersections with secondary roads).

The aesthetics of the highway corridor/right of way are important in enhancing the route. Therefore vegetation and litter require regular control. A program of inspections is required to monitor the condition of the right-of-way, with subsequent maintenance runs and litter pick-ups as necessary.

3.11.2 Operational Performance Measures

The Concessionaire is required to conform to the Operational Performance Measures by complying with all the specified requirements and response times from the *Highway Maintenance Specifications for Highway Concessions*.

3.11.3 Applicable Ministry Specifications

Highway Maintenance Specifications for Highway Concessions that are directly applicable include:

4-350	Roadside Vegetation Control.
4-370	Litter and Graffiti Removal.
5-470	Highway Traffic Control.

3.12 Access Control

3.12.1 General

Access onto the controlled access highways is restricted to the designated access points. Therefore the Concessionaire cannot permit any access contravening that status. However, permission to allow access onto the Highway Concession secondary roads may be considered. Any such applications received are to be dealt with under the Communications Plan and decisions must comply with the Ministry *Subdivision Policy and Procedures Manual*.

Note that there may be existing agreements/licenses for some accesses onto the right-of-way, which are defined in the Concession Agreement.

3.12.2 Operational Performance Measures

The Concessionaire is required to conform with the Operational Performance Measures by implementing all the specified requirements and response times of the CCP and the requirements below.

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The Concessionaire is required to monitor access onto the secondary side road roads by 6-monthly inspections. During these inspections, unauthorized/illegal accesses are to be recorded and the access constructor/owner then contacted within 2 weeks and advised of the Ministry policies on unauthorized accesses. Appropriate steps are to be taken (e.g. if safety is compromised by presence of the access then notice to the owner to close the access. If safety is not a factor but the presence of the access contravenes Ministry policy then advice can be provided to the owner on the process to apply for permission to have the access).

3.12.3 References

References include:

- Ministry Subdivision Policy and Procedures Manual;
- All respective Ministry policies; and
- The Highway's Act

3.13 Line Marking

3.13.1 General

Pavement lines and markings can increase traffic capacity, improve safety and contribute to the orderly behavior of vehicle travel paths. Pavement lines and markings are also used to supplement some traffic signs.

The Concessionaire is required to maintain pavement lines and markings, on the highway, to a standard consistent with the *Ministry Specifications for Line Marking*. Testing is to be undertaken at least twice annually in June and October to ensure compliance with the outcomes specified.

Line marking is the sole responsibility of the Concessionaire and conformance with requirements is to be demonstrated on an ongoing basis through the application of the Quality Management System.

3.13.2 Objectives

The line markings are required to be maintained at or above the minimum levels of performance as specified. The concessionaire is encouraged to:

- Focus on retaining markings in place at a standard above the OPM levels;
- Apply recognized long life materials;
- Use environmentally friendly (i.e. non-toxic) products; and

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- Ensure that markings comply with all performance criteria at all times, including immediately after the winter (snow and ice affected) period.

3.13.3 Operational Performance Measures

Lines and markings on the highway are required to conform to the minimum standards defined in the *Ministry Specifications for Line Marking*.

3.13.4 References

References include:

- Ministry Line Marking Specification

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4 ENVIRONMENTAL MANAGEMENT

4.1 General

The Concessionaire is required to develop, implement and maintain an Environmental Quality Management Plan that ensure all operations, maintenance and rehabilitation activities are carried out in full compliance with Federal and Provincial Environmental laws.

4.2 Requirements

The Concessionaire is responsible for managing environmental issues associated with the concession throughout the Contract Period, including operation, maintenance, and rehabilitation activities. This will include full compliance with:

- Applicable federal and provincial environmental legislation, statutory permits, licenses and approvals, or any authority required under any other enactment;
- Applicable municipal and regional environmental legislation, regulations, permits, approvals, bylaws, and/or guidelines;

In addition, the concessionaire will operate, maintain and rehabilitate the Project in accordance with the provincial and federal environmental guidelines and policies that may apply during the Contract Period Term. This includes the most current version of the following documents:

- Best Management Practices Manual, Ministry of Transportation document, July 2004;
- Habitat Conservation and Protection Guidelines, Fisheries and Oceans Canada, 1998;
- Standards and Best Practices for Instream Works, Ministry of Water, Land and Air Protection, March 2004;
- Land Development Guidelines for the Protection of Aquatic Habitat, Department of Fisheries and Oceans Canada and Ministry of Environment, Lands and Parks, 1992;
- Manual of Control of Erosion and Shallow Slope Movement, Ministry of Transportation (and Highways), August 22, 1997;
- Practitioners Guide to Habitat Compensation for DFO Habitat Management Staff, Fisheries and Oceans Canada, 2002;
- Recommended best practices information bulletins, publications, checklists and forms available at http://srmwww.gov.bc.ca/sry/csd/forms/#info_bul; and

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- SS 165 Protection of the Environment of the Ministry's Standard Specifications. If the Highway is classified as a "designated environmentally sensitive area" in accordance with SS 165.01.04 and is subject to all the restrictions set out in SS 165

The Concessionaire will maintain and update as necessary, an environmental management plan as part of their overall Operations and Maintenance Management Plan, which clearly outlines the responsibilities of Concessionaire throughout the operation, maintenance and rehabilitation phases of the Project. This may include, but not be limited to post-construction monitoring and maintenance of fish and wildlife habitat compensation and enhancement sites; water quality monitoring and mitigation; spill contingency planning and response; PAG and metal leaching materials and acid rock drainage monitoring and mitigation; and other environmental issues that may arise as a result of routine operation and maintenance activities.

The Concessionaire is fully responsible for any agency referrals and satisfying agency requirements during operation and maintenance.

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APPENDIX Terminology and Interpretation

In this Highway Corridor Management Specifications document, unless the context otherwise requires, terms will have the following meanings:

Assets are defined as the physical assets of the Highway Concession infrastructure including highway running surfaces, bridges, major retaining walls, major culverts, tunnels, snowsheds, major sign structures, drainage / debris control structures and electrical systems.

Avalanche Control is defined as the ability to implement a program of recognizing avalanche areas, the potential for the occurrences of avalanches, and effective control methods required to ensure the safety of the highway users.

Concession Standard is defined as the standard the Concessionaire is required to comply and report compliance with at all times to ensure that a measurable level of Service is maintained which reflects the road users day-to-day serviceability expectations on a network wide basis, and to permit auditing of the Concessionaires performance by the Ministry representative.

Corridor Management is defined as the application of best practices in conformance with Ministry province-wide policies and sound management techniques to maximize the reliability, safety and availability of the highway corridor for the benefit of the highway users and adjacent landowners consistent with all road networks within British Columbia.

Electrical Systems are defined as the infrastructure designed to be electrically run including but not limited to luminaires, sign lights, structure lights, structure decks and other heating systems, electrical message signs and all components of each of the above.

Emergency Management is defined as all activities as per the Province of British Columbia Incident Command System (ICS) in responding to emergency situations.

Environmental Management is defined as the compliance with Federal and Provincial Environmental Laws and Regulations and the application of best practices as per ISO 14001 environmental management system requirements to avoid or mitigate any detrimental effects on the environment in fulfilling obligations under this concession.

Highway Concession is defined as the highway corridor and all assets associated with the Concession.

Highway Maintenance Specifications for Highway Concessions are defined as the Highway Maintenance Specifications that relate to the operational maintenance and repair of the Highway and Bridge infrastructure and have been aligned with the Ministry of Transportation *Highway Maintenance Specifications for Highway Concessions* for the 2003-2004 Highway Maintenance Contracts (February, 2003) in reference to the terms and requirements of this specific Concession Agreement.

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Highway User means any person or persons, regardless of form of transportation, that uses the Highway.

Incident Command System (ICS) used as a basis for emergency response planning and incident management by many government agencies and industry in British Columbia.

Key Performance Measures are defined as the principle outcomes in the management of the Concession Agreement and delivery of professional services.

Line Marking is defined as the application of various markings / lines required to safely guide traffic to its destination along with the development of an effective program to ensure markings / lines are installed or replaced as required.

Ministry is defined as the Queen in the Right of the Province of British Columbia as represented by the Minister and The British Columbia Ministry of Transportation.

Ministry Representative is defined as a designated representative for the Province of British Columbia as represented by the Ministry and The British Columbia Ministry of Transportation.

Operational Management – is defined as the day to day management of a highway consistent with the applicable performance standards and Ministry policies to maximise the reliability, safety and availability of the highway.

Province is defined as the Province of British Columbia as represented by Partnerships BC.

Public Relations (Customer Care) is defined as the process employed to address complaints; advertizing; local purchasing; local hire; and community sponsorships.

Quality Management is defined as to provide the necessary processes and procedures as per ISO 9001 quality management system requirements to ensure the delivery of services required to manage the concession.

Rest Area Master Development Plan is defined as the Ministry document that provides the process, tools and recommendations for the rest area development within a planning framework.

Rock Slope Stabilization is defined as the identification of hazard areas and the mitigation methods used to prevent rock and debris from affecting the highway.

Safety Management and Intervention is defined as the plan to monitor and enhance the safety of the highway corridor.

Traffic Management is defined as the ability to recognize the various situations where traffic control and guidance are required; and the ability to implement effective procedures to safely control and guide traffic with minimal interruptions and delays

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Tunnels are defined as any buried structure intended to convey pedestrian, wild life, farm animals or vehicular traffic, with a minimum dimension of 3 meters.

Winter Maintenance is defined as all activities required for the removal of snow and ice and the provision of adequate traction for highway users including but not limited to highway snow removal, winter abrasive and chemical snow and ice control, and roadside snow and ice control.

Utility Operations are defined as the process of working in partnership with the Ministry of Transportation, Utility Companies and others in an effort to best accommodate all parties involved within the highway corridor.